

Supply and Da Man

Companies that green their supply chains can find savings galore

By Joel Makower

18 Jul 2006

How many light bulbs does it take to change a supply chain? In the case of Baxter Healthcare Corp., just three.

When Jenni Cawein, manager of corporate environmental health and safety engineering at the Illinois-based \$9.8 billion health-care giant, arrived six years ago, she saw that the company was losing ground on waste. "I asked my boss, 'Who's working with purchasing?' It turned out it was nobody," she says. Cawein set out to build a case for integrating environmental criteria into the company's procurement process.



Show them the money.

Photo: iStockphoto.

lasted 2 years, but used 30 percent less electricity.

"I asked what the purchasing department cared about the most," Cawein explains. "I did a lot of research, and of course they care about cost reduction, and had made certain commitments to reduce costs."

Armed with details about the department's goals, Cawein set up a time to address the purchasing staff. At that meeting, she offered an illustrative example involving three fluorescent light bulbs: one cost \$1 and was expected to last 2 years; another cost \$5 and lasted 8 years; the third cost \$2 and

"When I ran the actual numbers, including real costs of electricity for all of our facilities around the world, plus labor and disposal costs, and showed them the data, their eyes just opened up," says Cawein. "I showed them that the cheapest bulb would cost us \$50 million more than the most efficient bulb."

Cawein's message was clear: greening the supply chain is a strategic, bottom-line issue. Largely as a result of Cawein's light-bulb inspiration, Baxter has embarked on an effort to integrate environmental thinking into every aspect of supply-chain management.

Baxter is not alone in embracing supply-chain environmental management (though its effort may be one of the more ambitious). Companies in a number of sectors have been driving environmental thinking increasingly further upstream -- typically beginning with a handful of

their biggest suppliers, and expanding those successes to smaller players.

Link Link, Nudge Nudge

In recent years, the supply-chain environmental management, or SCEM, movement appears to have gathered steam, and has given birth to some new industry and government initiatives. The U.S. EPA's [Green Suppliers Network](#), a public-private partnership, aims to help suppliers and manufacturers eliminate waste, save money, and reduce their eco-impact. Members of the network -- including Abbott Laboratories, General Motors, GlaxoSmithKline, Herman Miller, Johnson & Johnson, Pratt & Whitney, and Steelcase -- focus on the root causes of waste, enabling them to decrease the use of toxic and non-renewable materials, use energy more efficiently, reduce labor costs, and promote greater employee participation in environmental-improvement activities.

At Baxter, SCEM isn't limited to buying light bulbs -- or, for that matter, to procurement itself. Its efforts extend from the manufacturing floor all the way to end users, primarily hospitals and doctors' offices.

Once Cawein helped her company's purchasing department understand the business value of SCEM, the next step was to bring manufacturing into the fold. Like many companies, Baxter has embraced the concept of "lean manufacturing," viewed by business gurus as being to the 21st century what "mass production" was to the 20th.

Lean manufacturing centers around the identification and elimination of waste. Its touted benefits are cuts as great as 50 percent in production costs, number of personnel, time required to get new products into the field, plus higher quality, higher profitability, and increased flexibility, among other things. In lean-manufacturing systems, waste-free, "continuous one-piece work flow" processes are highly reliant upon real-time supply-chain reliability. Lean manufacturing's focus on waste and procurement creates an attractive partner for SCEM: the former looks at things from a system-wide view, while the latter delves into the nitty-gritty process steps.

Baxter's supply-chain efforts extend downstream as well. The company's participation in another program co-sponsored by EPA, [Hospitals for a Healthy Environment](#), has enabled it to better understand some of the end-of-life issues its products encounter inside health-care facilities. That, in turn, has helped Baxter work with suppliers to make changes in packaging and materials that reduce customer waste. In one case involving a medical-grade plastic that usually ended up in landfills, the manufacturer was able to get government funding to help develop a less-wasteful alternative. "I would never have dreamed," says Cawein, "that there was as much government seed funding for these technologies as there is."

If You've Got the Money, Honey, I've Got the SCEM

Efforts like Baxter's demand that companies already have in place a firm environmental commitment and some strong management systems. A benchmarking survey of large companies

conducted several years ago by Business for Social Responsibility found that companies with leading supply-chain practices shared common organizational characteristics, including a strong commitment to environmental stewardship; a desire to serve as a model for their industry; clear, consistent, and frequent internal communication and communication with suppliers; ongoing supplier education; and continuous improvement through built-in feedback mechanisms.

Such qualities, BSR concluded, are what separate ad hoc, reactive approaches to supply-chain management from more holistic, strategic approaches like Baxter's.

Cawein will be the first to tell you that making such shifts isn't easy. "You've got to be persistent and patient," she counsels. "You're talking about culture change. It's going to take a while. What I tell myself is that as long as I'm making steps forward, I'm happy. I expect this [effort to improve] will never end if we do it right."

Learning how to talk with procurement folks is key, she says. "You have to focus on your own internal people who are responsible for suppliers first, and that will take you a while. Environmental people on their own cannot do this. They tend to talk in generalities, and purchasing people tend to talk in hard facts. When you talk about cost savings, you've got to be specific. That's the thing that really started to bring them over. It has to be quantifiable."

In the end, it's the economics, stupid. If you can convince the powers that be that there's a way to save money beyond the purchase price -- and then can show them that it comes out of a specific budget -- you can break through the purchasing department's traditional reluctance to change vendors or products, says Cawein. "You've got to show them the link and prove it to them. Once they understand that it's not funny money, they go out and start negotiating."

What's your toiling point? Don't check your values at the door. Send workplace questions, challenges, ideas, and pet peeves to toilingpoint@grist.org.



Joel Makower, founder of GreenBiz.com and cofounder of [Clean Edge, Inc.](http://CleanEdge.com), is a writer, speaker, and strategist on corporate environmental practices, clean technology, and green marketing.

Story images: on | [off](#)

Printer friendly version for: http://www.grist.org/biz/tp/2006/07/18/supply_chain/index.html

Grist Magazine: Environmental News and Commentary

©2006. Grist Magazine, Inc. All rights reserved. Gloom and doom with a sense of humor®.